

STCG TANK SUBGROUP MEETING MINUTES

May 12, 1998

WELCOME/UPDATES (ALEX STONE)

Alex opened the meeting and asked for introductions around the room. Dirk Dunning introduced Doug Huston from the Oregon Office of Energy, who will be taking his place for all STCG activities.

Actions from Last Meeting (Facilitator)

The facilitator reviewed the action items from the last meeting.

Upcoming Events (Cathy Louie and Alex Stone)

Cathy mentioned several upcoming events that may be of interest to Subgroup members. At the next Corporate Forum, EM-50 will be presenting their FY 2000 program and trying to gain site support. There will be a meeting in July to review the specific details of the TFA projects for FY 1999.

Cathy noted that TWRS is undergoing numerous reviews and budget-scrubbing exercises. Dirk commented that there will be horrible potential impacts of the OMB budget cuts for Hanford. Cathy noted that EM-50 may be getting additional funds, perhaps for ASTD. Alex mentioned that Christine Gregoire and Gary Locke are very involved in the DOE budget issues; they have already talked to Secretary Pena and to OMB.

Loni Peurrung mentioned that there will be a Waste Tank Safety Technical Exchange on June 2-3, mainly covering chemistry and physics topics. She will forward an e-mail message to the Subgroup.

There is a DOE-HQ HTI review in Richland on May 21 to revisit the original project objectives. We will try to get an update on this review at our June meeting.

IRB Briefing (Cathy Louie)

Cathy participated in the IRB briefing a few months ago as the Hanford Site TWRS representative to TFA, along with a number of users from the other tank sites. They worked on TFA's technology needs prioritization criteria. One message that came out of the meeting is that risks are not categorized consistently among the sites. Feedback from the meeting is that HTI and sludge washing may not be fully funded.

Privatization Update (Cathy Louie)

Lots of question/answer discussions are occurring at HQ. There will be a delay in the announcement due to the additional time needed for these discussions. The TPA milestone for the announcement *signing of a privatization contract for design, construction, and operation of a disposal plant* is July 31, and DOE will meet that milestone. There is currently enough money in the privatization set-aside to move ahead, but budget cuts could change that.

Technology Needs Process Schedule (Jim Honeyman)

Jim Honeyman provided an overview of the science and technology (S&T) needs process. FDH held their kick-off meeting on May 8 to get this year's process underway. All needs will be derived from acknowledged risks found in enabling assumptions, critical risk lists, program risk lists, and the technical basis review. All needs must have the relevant program manager's buy-in so that if the technology solution meets the performance requirements, the program will deploy it. The draft needs list will be sent to the Tank Subgroup by June 26, and a prioritization workshop will be held by July 15. The prioritized needs will be sent to the Management Council for review by the end of July, with Management Council endorsement expected in August.

The technology needs statements and the Multi-Year Work Plans will now be consistent. Technology Insertion Points (TIPs) will allow FDH to carry alternative technologies in the baseline.

ASTD Call for Proposals (Paul Scott)

TWRS is being cautious with response to this call, since it could take funds away from the Focus Areas (i.e., any proposals would compete with currently funded activities). Also, there are stringent return-on-investment (ROI) requirements that our tank technology deployment proposals have trouble meeting.

TWRS WASTE ACCEPTANCE, STORAGE AND DISPOSAL, AND VADOSE ZONE TECHNOLOGY NEEDS (CATHY LOUIE)

Cathy reviewed the following 1997 TWRS technology needs covered at this meeting:

Waste Acceptance

- RL-WT019 Immobilized Low-Activity Waste Product Acceptance Inspection and Test Methods
- RL-WT020 Immobilized High-Level Waste Product Acceptance Inspection and Test Methods
- RL-WT021 Secondary Products Acceptance Inspection and Test Methods

Storage and Disposal

- RL-WT011 Hanford Capsule Initiative: A Processing Demonstration of Cs/Sr Capsules for Final Disposition
- RL-WT013 Formulation of Reference Glass for Immobilized Low-Activity Waste
- RL-WT029 Standard Method for Determining Waste Form Release Rate
- RL-WT030 Glass Monolith Surface Area
- RL-WT031 Long-Term Testing of Surface Barrier
- RL-WT034 Getter Materials
- RL-WT035 In Situ Testing of Glass Release

Vadose Zone

- RL-WT028 Multi-Phase Moisture Flow in Arid Conditions
- RL-WT032 Testing of Sand-Gravel Capillary Barrier
- RL-WT033 Moisture Dependence of K_d
- RL-WT036 Field Measurements of Vadose Zone Hydraulic Properties
- RL-WT037 Distribution of Recharge Rates

TFA RESPONSE TO TWRS NEEDS (BETTY CARTERET)

Betty distributed information on TFA's responses to the technology needs listed above.

Barbara Harper noted that the TWRS Vadose Zone Characterization Program Plan is trying to define vadose zone needs right now and will have some more refined needs this year. She then asked if the generic needs would be sent to the Subsurface Contaminants Focus Area (SCFA). Cathy responded that TFA and SCFA are currently talking about this.

Fred Mann pointed out that conditions in arid soil sites are poorly understood. Most of the work has been done on saturated soils.

Betty stated that only one piece of the needs list above has been funded for FY 1998 - Waste Form Product Acceptance Testing. The work is being done at PNNL and the Savannah River Technology Center. This project needs to coordinate with the ILAW Disposal Program's ongoing work. Betty will ask Bill Holtzscheiter to call Fred. (This action has already been completed.) Fred wants some feedback on how to do a better job describing his S&T needs so they get a higher priority.

Dirk Dunning stated that there is a lack of response to our high-priority needs. Many of them are site-specific, so they are not a high priority to TFA even if they are a high priority to Hanford. He suggested that we not send any of our needs to HQ. He thinks that other sites use our needs input to shore up their own needs and get them funded. We should keep our needs here and fund them ourselves. Cathy responded that other sites have near-term opportunities for technology deployment and can get cleanup done much sooner than Hanford can, thus they are getting higher priority now.

Betty noted that the new S&T needs process that will link to the program baseline and to programmatic risks will help Hanford be more successful in getting its needs funded. She suggested that we choose wisely what needs we submit (i.e., only those that can compete well with the other sites' needs). The TWRS Program should fund the rest.

Dirk stated that we need to understand the TFA scoring process and run through it here among ourselves to see where our needs would rank.

Loni Peurrung stated that there are about 100 EMSP projects that deal with high-level waste (HLW), counting characterization and other cross-cutting projects. She isn't sure how many of those relate to our S&T needs. This year, half the EMSP call for proposals went to HLW; the other half went to D&D. She will send an e-mail message containing the address for the EMSP web site.

DST CORROSION PROBE (JIM NELSON)

Jim gave a lively presentation on the DST corrosion probe, which is his second favorite subject to talk about (his favorite subject is his kids). The prototype probe has been in Tank 241-AZ-101 since August 1996. The first-generation probe has been in Tank 241-AN-107 since September 1997. The second-generation probe is planned to go into Tank 241-AY-102 by August 1998.

Jim was pleased to report that he finally received funding to read the data obtained with the corrosion probe. He can now measure the onset of pitting and stress corrosion cracking in a tank.

Tank 241-AN-107 was described as an example of why the corrosion probe is important. This tank has been out of specification for about 12 years due a high concentration of nitrates (cracking agents). The estimated cost for completion of corrosion inhibitor addition is \$1.4 million. In addition, future vitrification costs would be increased by about \$100 million if the

inhibitor is added. The corrosion probe may indicate that the inhibitor addition is unnecessary, thus avoiding some large future expenses.

WRAP-UP/FUTURE AGENDA ITEMS (ALEX STONE)

Cathy noted that the Management Council wants the Subgroups to report monthly on their activities. She agreed to provide the summary to the Management Council this month, but encouraged other Subgroup members to provide their perspectives in the future.

ACTION ITEMS

1. Request an update on the May 21 HTI Program Review for the next Subgroup meeting (Linda Fassbender). - DONE
2. Ask Ed Fredenburg for a presentation on the subsurface grout barrier work (Linda Fassbender). - DONE
3. Provide TFA ASME Peer Review mid-year report to Subgroup (Cathy Louie).
4. Develop a detailed schedule for the tank science and technology needs process and distribute to Subgroup members (Cathy Louie, Paul Scott, Jim Honeyman, Linda Fassbender).
5. Forward the EMSP web site address to the Subgroup (Loni Peurrung and Linda Fassbender). - DONE
6. Send copies of the TFA Decision Criteria and DST Corrosion Probe presentations to the Subgroup (Linda Fassbender). - DONE
7. Forward the agenda for the Waste Tank Safety Technical Review to the Subgroup (Loni Peurrung and Linda Fassbender). - DONE

MEETING ATTENDEES

John Appel (PHMC/LMHC)
Carol Babel (DOE-RL/TWRS)
Bill Bonner (PNNL)
Ken Bracken (HAB)
Betty Carteret (PNNL/TFA)
Dirk Dunning (Oregon Office of Energy)
Linda Fassbender (PNNL)
Ken Gasper (PHMC/LMHC)
Barbara Harper (Yakama Indian Nation)
John Holbrook (PNNL)
Jim Honeyman (PHMC/LMHC)
Doug Huston (Oregon Office of Energy)
Cathy Louie (DOE-RL/TWRS)

Fred Mann (FDNW)
Vince Panesko (Pacific Rim Enterprise Center)
Loni Peurrung (PNNL)
Paul Scott (FDH)
Alex Stone (Ecology)

NEXT MEETING

The next meeting will be held on June 9, 1998 from 1:00 to 5:00 p.m. in the ISB-1 White Bluffs Room.